

**Abstract**

1           A distributed caching technique for use in computer networks is disclosed. The illustrative  
2   embodiment is particularly advantageous in computer networks that comprises a hierarchical topology  
3   because it removes some of the computational tasks associated with caching away from the network  
4   nodes that act as caches to other network nodes that are less burdened with computational tasks.  
5   Furthermore, some embodiments of the present invention use hash tables to facilitate the storage and  
6   retrieval of cached resources. The illustrative embodiment of the present invention comprises: hashing  
7   at a first processor a first resource identifier to create a hash key, wherein the first resource identifier  
8   identifies a first resource; transmitting from the first processor to a second processor the hash key and  
9   a request for the first resource; and receiving at the first processor a second resource in response to the  
10   transmission of the hash key and the request for the first resource from the first processor to the second  
11   processor.